Game Design Document

Fuhgeddaboutit Gaming

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No Sleep til' Brooklyn

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Glossary of Terms and Abbreviations

Bodega corner store with a variety of goods

Bensonhurst the name of an actual, predominately Italian-American neighborhood in Brooklyn, New York

Kingsborough Community College the name of an actual community college located in Brooklyn, New York

Our Lady of Guadalupe the name of an actual catholic elementary school in Brooklyn, New York

Timbs short for "Timberlands" a popular brand of boot

Arizona iced tea brand of iced tea commonly sold at bodegas

Chopped cheese sandwich made of chopped beef, lettuce, mayo, and ketchup

Baconeggandcheese a popular breakfast sandwich in New York made with bacon, egg, and cheese (pronounced as one word); may be served with salt, pepper, and ketchup

MetroCard plastic card that can be refilled with money to pay for rides on the New York City subways and buses

Ock slang term of the Arabic word "Ahkee" meaning "my brother"; used as a term of endearment and respect for the Arab and/or Muslim owner/worker of a bodega or corner store

Newport here, a brand of cigarettes

Boroughs New York City is divided into five districts, or boroughs: Queens, Manhattan, Brooklyn, Staten Island, and the Bronx

NPC non-playable character

NSTB abbreviation for the game title

Game Narrative

I. Main Character: Tony Giovanni

Tony Giovanni is a 25-year old New Yorker who works at a bodega in Bensonhurst. He attends classes part time at Kingsborough Community College and is working towards his associate degree in criminal justice in order to start his career as a police officer.

Outside of work and school, Tony enjoys spending time with his girlfriend Daniella Marie Gargiulo, playing video games, and hanging out with his friends, most of which he's known since kindergarten at Our Lady of Guadalupe. Still, despite everything going on in his life, he still makes time to spend with his family, and wouldn't dare skip Sunday dinners with the family (his mother would kill him if he even suggested it!).

II. Back Story

While working at the bodega on the night before Halloween, a hooded customer walks in looking what Tony could only call "busted": beat up Timbs, tattered puffer jacket, dirty jeans, and a tank that's seen better days. Tony, having seen worse, shrugged it off and continued taking inventory. When the customer finished getting his stuff, Tony noticed that he picked up the staples: an Arizona iced tea, a bag of chips, a chopped cheese, a baconeggandcheese, and a two-ride MetroCard. Tony gave him the price: $7.50. The customer, in a voice so raspy that Tony was surprised he didn't buy a pack of Newport's, asked "Yo, can you do me a solid and cover me?". Despite being a devout Catholic, Tony knew that business was business, and freebies didn't pay the bills (also, Ock would have a few words to say if he did), so he shook his head no. The customer asked again, but Tony didn't change his answer. Getting frustrated, the customer reached into his jacket and pulled out…a domino. He slams it on the counter before walking out, slamming the door behind him. Tony picked up the domino, which, unlike the classic black and white ones, had sharp edges, was dark red, and had skulls

for the dots. While examining the domino, Tony noticed that it got warmer and warmer to the touch. However, before he had the chance to put it down, a powerful force pulled him in, leaving the bodega completely empty.

When Tony comes to, he looks around and is thankful that he's still in New York…that is until he sees the overgrown rats and pigeons running straight toward him, hellbent on attacking him. Running as quickly as he can away from the beasts, he runs into the Ock that runs the bodega where he works. Thankful to see a familiar face, Tony begins telling his boss about the customer and the domino. His boss nodded, but instead of reassuring him, he says in a thick Arabic accent, "You encountered an evil spirit. They tend to be more devious the closer it is to Halloween when their powers are more potent. Also, I'm not your boss; just a version of him in this alternate New York." Seeing the horror on Tony's face, the alternate-world Ock tries to offer him some hope: "Getting back to the real New York is possible. All you have to do is get through the five alternate boroughs, defeat the spirit that sent you here, and don't get killed on the way. Good luck with the rats though. I really thought they couldn't get any bigger". With that, his boss disappears. Feeling somewhat reassured that he can return to his city, Tony ties up his laces, and begins making his way through the first borough.

Gameplay Overview

I. Main Objective

In "No Sleep til' Brooklyn" (NSTB), the player must help Tony successfully get through each of the five boroughs of New York (Brooklyn, the Bronx, Manhattan, Queens, and Staten Island), and defeat the evil spirit that banished him to the alternate New York in order to return to his home in Brooklyn. It is appropriate for players 10 and up who are looking for a comedic and appropriately challenging goal-based game. Depending on player ability, it should take approximately 5 – 10 minutes to complete each borough, with total gameplay averaging about one-hour minimum.

II. Short-term Goal

The player must collect the following five objects that will allow Tony to leave each borough and progress to the next:
- MetroCard
- Arizona iced tea
- baconeggandcheese
- chopped cheese sandwich
- city bus

III. Mid-term Goal

The player must avoid the enemy NPC rats and pigeons that will result in a lost life if collided with.

IV. Long-term Goal

The player much reach Staten Island and defeat the evil spirit that sent him to the alternate New York. Upon successful completion, the player is transported back to the real New York, beats the game, and the game ends.

Mechanics

I. Abilities

The player can control Tony's movements using the following keys:
- *D key*: forward movement
- *A key*: backward movement
- *Space*: jumping

II. Assets and Attributes

The primary attribute in the game are three hearts that represent lives. When the player collides with an enemy NPC, a life is lost. The game ends when all three lives are depleted.

The assets are the five items listed within the "Short-Term Goal" section.

III. Obstacles

The obstacles are the NPC rats and pigeons that the player must dodge to avoid losing a life.

Dynamics

I. Required Hardware

NSTB can be played on a desktop or laptop computer that runs on Mac OS or Windows OS and is equipped with a functional keyboard and mouse or trackpad. The player can control Tony with the keys noted in the "Abilities" subtopic of the "Mechanics" section.

Game Development

I. Development Environment

NSTB was created using C# in the Unity game engine.

II. Development Sequence

The following shows a tentative, unordered list of development goals that must be accomplished to produce a playable prototype. This list does not include playtests between the addition of new mechanics:

- Program main character movements (see "Mechanics")
- Program tutorial level(s) and puzzles
- Program enemy NPC movements
- Implement UI
    - Health hearts
    - Start screen
    - Game over screen
    - Menu system
- Record and add music and sound effects
- Develop new levels with appropriately increased difficulty

Aesthetics

I. Characters, NPCs, and Assets

Sprite sheets for the main character and enemy NPCs were obtained for free under the protection of the Creative Commons license from kindpng.com. Sprites for required items (see the "Short-term Goal" subsection of the "Gameplay Overview" section) were created by the team.

II. Game World

The game takes place in an alternate New York City where the evil presences roam rampantly. The backdrop will reflect the boroughs (see "Gameplay Overview") as well as the evil aura characteristic of a nether-world version of New York. The backdrop was obtained for free under the Creative Commons license from spriters-resource.com.

III. Sound Effects

All sound effects were recorded and/or created by the team.

IV. Music

All music was recorded and/or created by the team.

Images

Depicted below in no particular order are the sprites and images used in NSTB. Sources and credits for all sprites and images can be found in the "Characters, NPCs, and Assets" subsection of the "Aesthetics" section. All sprites have been resized for the purposes of this document, and do not represent their actual sizes during gameplay.

Figure 1 Arizona iced tea sprite

Figure 2 Bacon, egg, and cheese sprite

Figure 3 Chopped cheese sprite

Figure 4 MetroCard sprite

Figure 5 City bus sprite
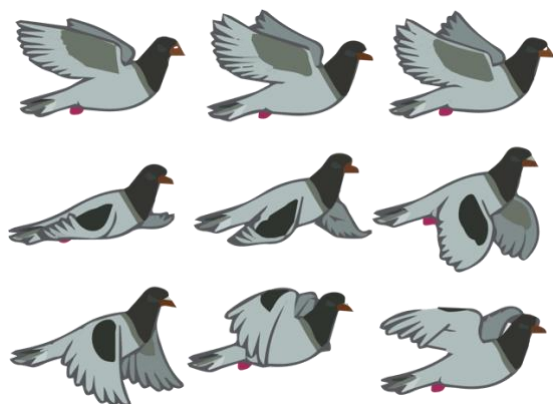
Figure 6 Pigeon enemy NPC

Figure 7 Rat enemy NPC

Figure 8 Backdrop

Figure 9 Tony Giovanni character sprite

State Machine Diagrams

The following figures depict the state machine diagrams for the jumping, forward movement, and backward movement mechanics in NSTB.
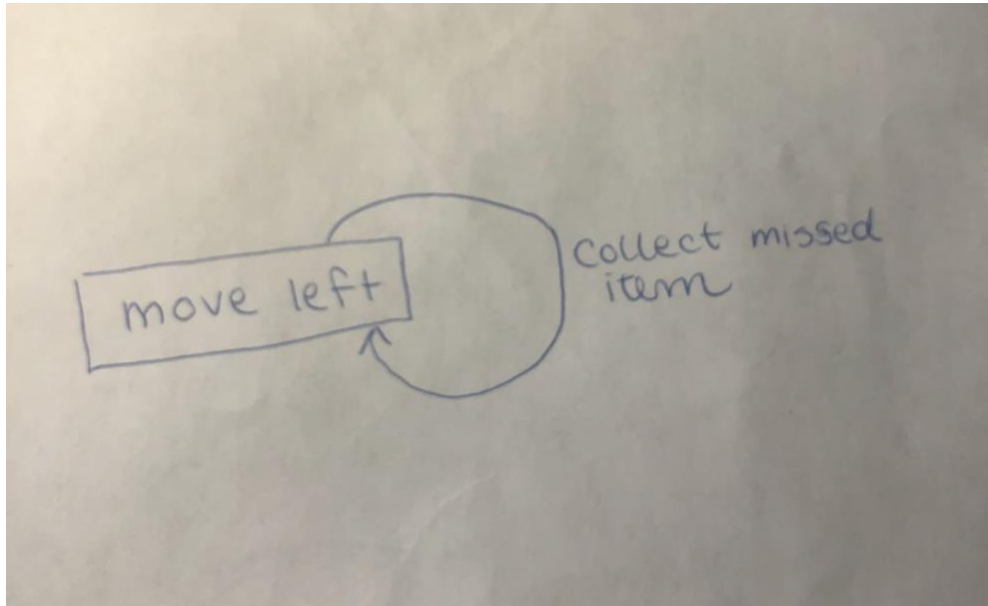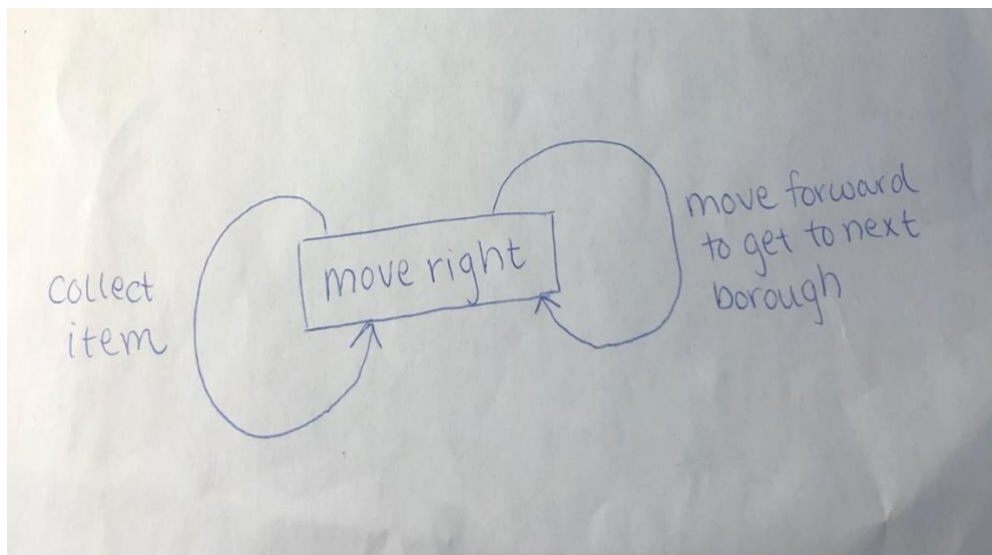

Figure 10 Move left state mechanic
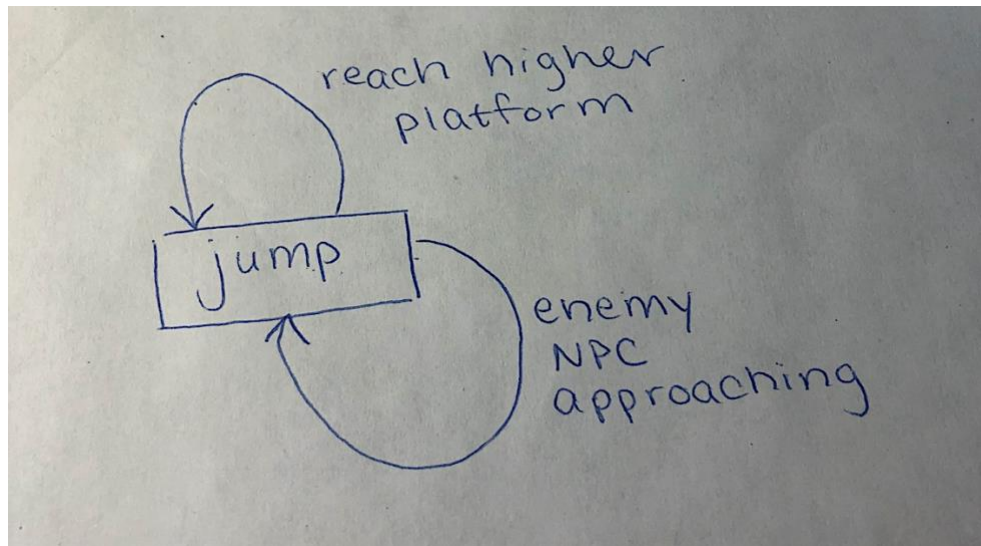

Figure 11 Move right state mechanic

Figure 12 Jump state mechanic

Team Member Roles and Contributions

Christian Vargas-Polo: *Backend/Graphics/Specs*
Specs:
- Created the narrative alongside Arielle and Titus
- Initial outlining of the game design document

Graphics:
- Created sprites for the collectible items
- Created background music

Backend:
Worked on the main functionality and visuals of the game, including camera, character, and monster mechanics

Arielle Watson: *Specs/QA*
Specs:
- Created the game design document
- Created game studio logo, play button, quit button and game name
- Created state machines for game mechanics

QA:
Refined scope of the game, and adjusted the document as the game evolved

Titus Wen: *Backend/QA*
Backend:
- Created the Start/Game Over menu
- Created the lose condition

QA:
Refined character movement mechanics and remaining life indicator

Michael Fertig: *Backend/QA*
Backend:
- Created the settings menu and audio settings
- Added additional music

QA:
Improved the main menu